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**Project**

Memorial (Route 1) Bridge  
Rehabilitation, Portsmouth,  
NH and Kittery, ME

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**Project No.**

13678

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**From**

Addie Kim

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**Meeting Notes****Subject**

Public Meeting  
January 17, 2006, 7 PM  
Portsmouth High School

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**Presenters:**

Nancy Mayville – NHDOT – Project Manager  
John Watters – HNTB Corporation – Project Manager  
Addie Kim – HNTB Corporation – Environmental Task Manager  
Gene McCarthy – McFarland-Johnson, Inc. – Traffic Task Manager

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**Introduction**

The purpose of this meeting was to present the Memorial Bridge (U.S. Route 1) Rehabilitation Project to the general public, elected officials, and public officials from Portsmouth and Kittery. The meeting was held at Portsmouth High School in Portsmouth, NH at 7 PM on Tuesday, January 17, 2006. More than 100 persons attended the meeting, which included representatives of the New Hampshire Senate, New Hampshire House of Representatives, Portsmouth City Council, the Portsmouth City Manager, Kittery Town Council, the Kittery Town Manager, Portsmouth Department of Public Works, Portsmouth Economic Development Commission, Portsmouth Historic District Commission, Portsmouth Historical Society, Portsmouth Police Department, Kittery Planning Board, Greater Portsmouth Chamber of Commerce, Portsmouth Advocates, the Eastern Trail Management District, Bicycle Coalition of Maine, Seacoast Area Bike Routes, New Hampshire Public Radio, Foster's Daily Democrat, the Portsmouth Herald, and the New Hampshire Department of Transportation (NHDOT) (see attached sign-in sheet). The meeting was formatted as a PowerPoint presentation followed by a question and answer period.

**Project Overview**

Nancy Mayville, Project Manager, NHDOT indicated that the meeting was being held to obtain broad public input into how the design and repairs should be performed on the Memorial Bridge. The Memorial Bridge is jointly owned by the state of New Hampshire and the state of Maine. On the Portsmouth approach, the Scott Avenue Bridge, which carries U.S. Route 1 over local streets, is owned by the City of Portsmouth.

Nancy Mayville indicated that the first phase of the project involved the inspections of both bridges. The second phase of the project involves obtaining public input into the design, identifying the preferred alternative, and documenting environmental and cultural impacts. The third phase will involve preparation of construction plans and bid documents. This is the second meeting held to obtain public input. The first meeting was held with public officials in Portsmouth and Kittery to obtain a better understanding of local traffic concerns. Since this initial meeting, more design analysis has been performed, and the alternatives refined.

Nancy Mayville indicated that the project will receive 80% federal funding, and 20% funding from bridge replacement program from both New Hampshire and Maine. Agreements with the Portsmouth City Manager are in place regarding the Scott Avenue Bridge Replacement that is incorporated as part of the project. The project is on the NHDOT 10-year improvement program, and construction on the project will start in 2009, contingent on the availability of funding. The bridge is being monitored closely, and a separate interim project to effect repairs may be performed before the start of construction.

### **Project Background and Proposed Improvements under Consideration**

John Watters, HNTB Corporation, indicated that the three bridges in the project area are the Scott Avenue approach in Portsmouth, the Memorial Bridge trusses and vertical lift bridge over the Piscataqua River, and the Kittery viaduct approach. The Memorial Bridge was constructed in 1922 and serves as a vital link for the Seacoast Region and Northern New England. The bridge accommodates approximately 4,000 vertical lifts a year to accommodate navigation on the Piscataqua River and carries 12,000 vehicles per day. During the summer months, several hundred pedestrians and cyclists use the bridge on a daily basis.

John Watters indicated that the project is the number one priority on the NHDOT Red List Bridge. The mechanical components of the bridge that are part of the pulley system operating the vertical lift are deteriorating. The trunnion, which acts as the axle of the pulley system, and ropes have exceeded their fatigue life and are on a six-month inspection schedule. The steel framing of the bridge has experienced significant corrosion, particularly the underlying lift span, which is subject to corrosion from winter-time salt de-icing applications. Repairs affected in 2004 raised the weight limit on the bridge from 6 tons to 20 tons. As part of the project, the control house will be relocated from its current location atop the lift span, to improve safety, access to sanitary facilities, and operator visibility. Roadway and sidewalk safety can be enhanced by the replacement of the steel grid decking on the lift span and timber planking on sidewalks to provide better slip resistance.

The Scott Avenue Bridge has active corrosion of the concrete and reinforcing, and inspections indicate that complete replacement is needed. The new replacement bridge will improve roadway geometry and visibility, as fewer piers will be installed under the U.S. Route 1 bridge deck.

John Watters indicated that the options under consideration for the Memorial Bridge include rehabilitation or complete replacement of the vertical lift span. The project also includes repairs of the bridge fenders, piers, and steel repairs. Other options that were considered in the first phase of the study included limited rehabilitation, a new vertical lift bridge, a new bascule movable bridge, and a tunnel option. John Watters indicated that the costs of the

rehabilitation and replacement are estimated at approximately \$37 million and \$38.9 million, respectively, and options to reduce project costs are being considered.

John Watters indicated that two possible construction scenarios were being evaluated. Initially, the construction scenarios identified involved a 1 to 1 ½ year complete closure or a 2 to 3 year partial closure. These construction options have been further refined and now consist of: a partial closure option and a reduced partial closure option with alternating one-way traffic. Under the partial closure, a 5-month complete closure for vehicular traffic would be required, and bikes and pedestrians will be permitted after the first two months. Minor 2- to 3-day closures will occur during this period for structural steel repairs. Under the reduced partial closure with alternating one-way traffic, the roadway would be completely closed to cars, pedestrians, and bikes for 2 months, and alternating one-way traffic would be accommodated for 6 months. There would likely be more 2-3 day closures for navigational traffic under the reduced partial closure with alternating one-way traffic option. Under both options, normal two-way traffic will be maintained over the remainder of the 24-month construction period, when construction will be staged from scaffolding/staging areas under and above the existing bridge deck. These times are approximate, and the work could theoretically be performed starting March 1, with a greater risk of delays past November 1 and increased costs with the reduced partial closure.

### **Bridge Closures Options and Impacts on Traffic, Pedestrians, and Bicyclists**

Gene McCarthy, McFarland Johnson, Inc., indicated that two options for bridge closures during construction were being evaluated: complete closure of the bridge or partial closure with alternating one-way traffic. Construction would be completed in a shorter timeframe under the complete closure option. The main detour routes during construction would consist of I-95 (Piscataqua River Bridge) or the Route 1 Bypass (Sarah Long Bridge).

Gene McCarthy reviewed the results of traffic intercept studies. Roughly 250 drivers and 100 pedestrians and bicyclists were surveyed on August 19<sup>th</sup> and 20<sup>th</sup> of 2005 as to whether they preferred a 1- to 1 ½-year complete closure or a 2- to 3-year partial closure option. Most drivers (61%), and the majority of pedestrians and cyclists (80%), prefer a partial closure option. These surveys indicated that approximately 70% of traffic on the Memorial Bridge is local. Under the full closure option, more people (61%) would use the Route 1 Bypass than would use I-95 (36%), and less than 1% of drivers would cancel their trip. Gene McCarthy indicated that surveys will be distributed at the end of the meeting to poll attendees regarding preferences for construction scheduling and their use of the bridge.

The transportation model developed using the Regional Planning Commission Seacoast Model also indicates that 60% of trips on the Memorial Bridge are local. This model will be used to evaluate the effects of a partial and complete closure of the bridge.

Gene McCarthy indicated that the bridge receives heavy use by pedestrians and cyclists. Of those surveyed, 46% would use a vehicle to make the trip if the bridge was closed, and 26% would not make the trip at all. The intercept survey indicated that 4% would change their trip to not cross the river, and 24% would choose to be taken over the river.

### **Navigation/Business Surveys and Environmental Studies**

Addie Kim, HNTB Corporation, indicated that the environmental study process includes obtaining public and agency input into the decision on a preferred alternative for the project. The impacts and mitigation measures will be documented in an Environmental Study Report to support a Categorical Exclusion determination under the National Environmental Policy Act. The public outreach activities include a business survey, a navigational survey, and public meetings.

A business survey in downtown Portsmouth and Kittery will be performed that will be distributed both by mail and hand-delivered. The survey area will include the downtown Portsmouth business district, Badger's Island, and the Kittery Foreside district. Several hundred businesses will be surveyed to identify construction preferences and issues of concern for local businesses.

Addie Kim indicated that consultations have been performed with the U.S. Coast Guard (USCG), New Hampshire Port Authority and local harbor masters regarding potential navigational outages. A navigational survey was sent to large shipping concerns, boatyards, tourism charters and ferries, and commercial fishery to identify navigational requirements of these users and issues of concern. The two types of seasonal users are the recreational uses that extend from May to November and critical fuel deliveries that extend from October to March. Most of the survey respondents reported minimal impact from previous bridge closures and indicated that short-term closures were acceptable.

The project has included coordination with federal, state, regional, and local officials, and meetings with natural resource and cultural resource agencies and Portsmouth and Kittery public officials. Wetland resources at the project site are defined by tides in both New Hampshire and Maine. In Portsmouth, the coastline is defined by the seawall, and the coastline in Maine is rocky and partially riprapped. No alterations of tidal flats or river bottom are anticipated as part of the project.

The Memorial Bridge is eligible for listing on the National Register of Historic Places. A Draft Historic Structures Report has been prepared that meets requirements for a HABS/HAER assessment should portions of the bridge need to be replaced. A determination of eligibility has been prepared for Memorial Park as part of the Portsmouth bridge approach, which was constructed on fill over the former site of historic buildings. Archaeological investigations have been performed in Memorial Park. This investigation concluded that no impact will occur if excavation does not exceed below 4 feet. Due to the depth of the fill prism and logistical concerns regarding traffic circulation and encountering groundwater, archaeological monitoring is proposed during construction.

## **Next Steps**

John Watters indicated that another public informational meeting will be held following further development of the preferred construction and design alternatives. No public hearing for the purposes of highway layout will be required. Next steps will include identification of the preferred alternative, and obtaining design approval from FHWA.

## **Discussion**

The meeting was opened up for questions and comments.

- **David Burchill, Kittery Point inquired whether a small ferry had been considered.**  
Nancy Mayville indicated that some sort of shuttle is on the menu of options to be considered. She noted that March-April, when the roadway would be closed completely to pedestrians and cyclists, is a low-use season.

- **Joel Karp, Portsmouth resident indicated that the existing bridge is an obstacle to the Port of New Hampshire, due to inadequate vertical and horizontal clearances and inquired about a tunnel option.**  
Nancy Mayville indicated that at the start of the project, all of the alternatives were evaluated and those that were not reasonable were not carried forward. A tunnel would be prohibitively costly and would involve right-of-way takings in the Portsmouth Business District for the transition to the tunnel. There is a strong community need for the bridge and its connection to the local roadway network.

- **Joel Karp, Portsmouth resident inquired whether the towers and deck could be raised by 30 feet.**  
John Watters indicated that the current tower is not capable of accommodating the load, and this would be more expensive than a replacement of the bridge.

- **Jim Powers, State Representative for Portsmouth inquired, under one-way traffic, what the weight restriction would be. At present, the weight of the fire trucks is an issue for mutual aid agreements, as some trucks can't use the bridge.**  
John Watters indicated that the 20-ton weight restriction will not be lowered during construction. After construction, this weight limit will be removed.

- **Dan Hughes, State Representative for Newcastle and Rye indicated that the mutual aid agreements for life safety are complex and the weight restriction poses a problem for first run responding vehicles, some of which (Portsmouth Naval Shipyard Fire Department) need to bypass the bridge. He indicated that, under current law, the bridge is to be completed by 2007, and the project should be completed by then. He indicated that this is the #1 Red List Bridge and has the support of Portsmouth and the SeaCoast region.**  
Nancy Mayville indicated designing the 10-year plan is a process that she is not a part of. However, she indicated that projects can be prepared sooner in the event that funding is made available, and it is anticipated that the project could be ready sooner in the event that funding is available sooner.

- **Dan Hughes commented that the federal government provides 80% funding, and Maine funds 50% of the remaining, so the project should not be as expensive.**

- **Ann Grinnell of the Kittery Town Council inquired what work is planned for the Kittery viaduct.**  
Nancy Mayville responded that no work will be performed on the bridge deck, but the sidewalk will be replaced to be consistent in appearance with the rest of the bridge.

- **Ann Grinnell stated that she had concerns regarding the deterioration below the surface.**

Nancy Mayville stated that it would be MEDOT's decision as to whether to work on the deck of the viaduct.

- **Ann Grinnell indicated that the surveys should include Carl's Meat Market and the Golden Harvest, and consideration should be given to surveying customers.**  
John Watters indicated that the survey areas would be reviewed with the Town of Kittery, and these comments taken into consideration.
- **Charlie LaFlamme, Bicycle Coalition of Maine, indicated that the grates are an hazardous to cyclists, and that this bridge is the gateway to Maine, since bikers cannot use the other bridges. He indicated that he was disappointed that the NHDOT pedestrian-bicycle coordinator was not present, and would like to see something planned for cyclists, such as a ferry, during the two-month closure period.**  
Nancy Mayville indicated that this ferry option is on the menu of items to be addressed, in addition to a shuttle option. She is coordinating closely with the NHDOT ped-bike coordinator on the options being considered, and he is well aware of the project.
- **Charlie LaFlamme indicated that Share the Road signs and striping should be considered.**  
Nancy Mayville indicated that this comment was duly noted, and this issue was also discussed at the public officials meeting.
- **John Bohenko, Portsmouth City Manager, indicated that he was pleased that the timeframe for the bridge closures has been reduced, and indicated that his office would like to be kept informed as to the areas surveyed. He expressed a concern of city staff (police, public works) that alternating traffic not impact the Central Business District, and significant impacts could be very detrimental to local businesses.**  
John Watters indicated that the project team will coordinate with the City Manager's office in performing the business survey.
- **Steve Workman of the Eastern Trail Management District indicated that the bridge is part of the loop for the Eastern Trail. He voiced a concern regarding drainage grates or scuppers on the roadway and advocated for a continuous concrete section on the proposed roadway.**  
Nancy Mayville noted that this comments would be considered in formulating the roadway design.
- **Terrence Parker, Eastern Trail Management District, indicated that people get hurt riding across the bridge and that consideration should be given to redesignation to allow bikers to share the sidewalk with pedestrians.**  
Nancy Mayville noted that NHDOT has considered safety of the mixed group that uses the bridge, and cyclists need to walk since the railing is not high enough to accommodate riding on the sidewalks.
- **Roger Jutz, Portsmouth resident, cyclist who works at the shipyard, concurred that he has fallen on the grates and that it is not safe to walk across the bridge in bike cleats.**

This comment was noted.

- **Steve Kosacz, Kittery business owner, suggested distributing surveys for customers and indicated that 40% of his clients are from Portsmouth. He indicated that he has gone down on the grates in wet weather. He proposed that the east side of the sidewalk be available to cyclists, and that bikes not be allowed on the west side, due to conflicts with workers and pedestrians.**

Nancy Mayville indicated that this comment was duly noted. She indicated that she did not believe that this idea had been raised previously.

- **Cameron Wake, SeaCoast Area Bicyclists, inquired what would happen after the 2-month roadway closure and asked whether the grates could be filled in prior to construction.**

Nancy Mayville indicated that one sidewalk would be opened after 2 months for use by pedestrians and cyclists. She indicated that filling in the grates would be impracticable, since the lift span has been subject to significant deterioration and there is a need to keep the weight of the bridge under control until the bridge can be repaired.

- **Richard Candy, Vice President of the Historical Society indicated that the business survey should encompass non-profit institutions.**

This comment was noted.

- **A Portsmouth resident (student and cyclist) indicated that they had heard of the meeting by chance and inquired whether the general population would be surveyed.**

Nancy Mayville indicated that the notices for the meeting are published in the newspapers and there has been media coverage. She indicated that consideration would be given to a broader notice and consideration would be given to placing surveys in local businesses.

- **Mary Karalikas indicated that she owns property on Badger's Island and was concerned about structural deterioration of the bridge underwater that can't be seen.**

John Watters indicated that an underwater inspection using divers was performed by Appledore Engineering that indicated that the substructure was in good condition. The granite facing in the splash zone is subject to deterioration, but if the structure is deep enough and there is not exposure to oxygen, then the structure does not deteriorate as fast. The piers were found to be in good condition.

- **Mike McNeilly, Portsmouth resident and cyclist, commented that, when the project is completed, the cyclists would use the roadway. He inquired whether any consideration was given to using one sidewalk for pedestrians and the other side for cyclists. On the Golden Gate Bridge, the ocean side is dedicated for use by bikes.**

Nancy Mayville indicated that this would be added to the list of things to be considered and would have to be looked at first.

- **Peter Egleston, Elliot resident who commutes to Portsmouth for business, inquired why the side of the bridge without the operator couldn't be used by cyclists in the interim, although bikers will be accommodated when the project is finished.**

Nancy Mayville indicated she would bring this question back to the group responsible for bridges, and the NHDOT ped-bike coordinator would be part of the discussion. A response on this issue would be funneled back through him to the bicycling community.

- **Liz Bratte commented that traffic comes to a grinding halt right now when the bridge lifts. She indicated that she could not image 8 months of one-way traffic. She suggested using a metal fence on the bridge as a railing and suggested that drainage on the bridge be pulled further out from the roadway. She indicated a preference for maintaining the bridge as it is, and disagreed with the comment raised about constructing a tunnel in Portsmouth.**  
This comment was noted.
- **Andy Richmond, Portsmouth resident and cyclist, commended efforts to accommodate cyclists and noted that the obvious presence of cyclists at the meeting should be taken into account.**  
This comment was noted.
- **Steve Pesci of Portsmouth commented that use of a ferry would be a tourist draw and emphasized the need to preserve aesthetics in the design. He noted several design issues: the design of Scott Avenue sidewalk transition, the strange vehicle/pedestrian crossing, and the design of Memorial Park.**  
This comment was noted.
- **Dave Cohen, who lives in York and works in Portsmouth, asked how many in the audience were cyclists [ $\frac{1}{3}$  to  $\frac{1}{2}$  raised their hands] and noted how important this issue is to the Seacoast area. A question was raised on work on the Sagamore Bridge over Sagamore Creek.**  
This comment was noted. Nancy Mayville commented that this bridge is owned by the City of Portsmouth, and they are starting design on this.
- **Judy Spiller, Kittery Town Council, commented that she had concerns regarding traffic impacts on the bypass and commented that access by the Sarah Long Bridge, at best, was not safe.**  
Nancy Mayville noted that this issue is on the checklist of items to be considered.
- **Jen Ritman, Portsmouth, noted that the ferry idea would be a great PR coup for the process.**  
This comment was noted.
- **Chris Dwyer, Portsmouth City Council, noted a concern that the surveys ask for input on two construction options. He indicated that it is hard to see how a decision would be made, since this would represent overly simplistic responses on preferences and there are more issues and competing variables involved. He questioned what the survey results would mean.**  
Nancy Mayville indicated that the team would think about how to present the issues, and a handout, similar to the public meeting handout, may accompany the surveys. John Watters indicated that the surveys are one component to be considered in the decision-making process.



- **Philip Roger inquired who will make NHDOT work with MEDOT in coordination with the communities. He commented that there are many issues to consider at DOT with input from a lot of people.**

This comment was noted.

- **Steve Workman of the Eastern Trail Management District (ETMD) indicated that the life span of the rehabilitation should be considered, due to the expense and aggravation of the construction. He indicated that, when the contract goes out to bid, a liquidated damages option would be a good incentive for the contractor to remain on schedule.**

Nancy Mayville indicated that this is part of the standard specifications and DOT does enforce this. They don't allow for weather days in this provision. John Watters indicated that part of the decision will be based on life cycle considerations and which alternative would be best in the long term, not the short term.

- **State Senator Martha Fuller Clark indicated that the alternating traffic option would result in constant gridlock and that there would be no easy way to address this. She suggested that greater input be generated through surveys placed at City Hall and the library. She suggested that a solution be identified, if the traffic backs up, as to how this would be handled.**

This comment was noted.

- **Dave Adams, Portsmouth resident, indicated that staging of construction will span months for mechanical repairs and inquired whether consideration had been given to staging so that the summer months are free.**

John Watters indicated that favorable weather for construction is March at the earliest, with construction from March to April, so that the end of the season September, October, and November would be open. If work was begun after the summer season, construction would halt in the wintertime, and there would be a cost premium if the work was segmented. Staging early in the summer makes better logistical and economic sense.

- **Jonah Fernald, owner of Portsmouth Rent and Ride, indicated that he supports leaving the summer season open. He noted that a ferry system would be a selling point. He indicated that he would like to receive a business survey.**

Nancy Mayville indicated that March and April are a low use time of year. John Watters indicated that it will be necessary to close the bridge to perform the mechanical repairs.

- **Scott Bogle, Senior Transportation Planner with the Regional Planning Commission and the SeaCoast MPO, supports a safe bike facility and the solid bridge decking proposed. The MPO, the NHDOT ped-bike coordinator, and the ETMD are looking at option for the interim condition and would be interested in the costs for raising the railing and repair of sidewalks.**

This comment was noted.

- **A Kittery resident commented that repair of a bridge in Kittery was performed, and a temporary bridge was constructed in the winter so that there was no effect on summer traffic. He inquired why similar scheduling could not be done for this project.**

Nancy Mayville stated that she has 30 years of experience, half of which was spent in construction and working with bridges. She stated that some work can be done in winter, such as temporary bridge construction, but painting and welding is weather dependent and extreme weather conditions can drive the cost of construction up.

**Other General Observations prior to and after the presentation:**

John Hynes, Portsmouth City Council, indicated that the Portsmouth City Council approved the Memorial Park as the site for the Martin Luther King Memorial Site. He chairs the committee on the memorial site. No designs have been formulated for the park, as the committee is awaiting the outcome of the bridge rehabilitation project. This memorial site would become a part of the Black Heritage Trail in Portsmouth.

Steve Workman of Eastern Trail Management District had a concern about the bridge scuppers and impediments to biking. The concern was that scuppers in the roadway should be cyclist friendly. Some issues are that scuppers should not be depressed below the finish roadway surface, any grating should be perpendicular to traffic to avoid tires becoming engaged in the grooves, and longitudinal drainage trenches are usually not preferred since they can visually cause the riders to move out into the travel lanes and usually have longitudinal grooves that are not compatible with bicycle tires.

The meeting was adjourned at 9:30 PM.

cc: All Presenters  
FILE 34437-DS-002-004

***We believe these minutes accurately reflect what transpired at the meeting. If these minutes are not in accordance with your understanding, please contact the undersigned promptly; otherwise, we will assume that you concur with the accuracy of the above.***